

## HISTORICAL BACKGROUND OF INDIAN AGRICULTURE THROUGH THE AGES

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### ABSTRACT

*Agriculture is an important part of the Indian economy and serves as its backbone. Our country's geographical location has made agricultural activities exceedingly comfortable. The current state of Indian agriculture has evolved over time, and it is impossible to understand where we were previous to freedom. India's developed agriculture system dates back to 9000 BC. Weeds, in addition to the pests identified in the Atharvaveda, were introduced during the late Vedic period. Charms and spells were used as preventative measures, along with certain materials that appeared to have pesticide effects. According to the Arthashastra, a citizen's responsibility in the agricultural sector is a key concern. There has never been another moment in Indian history when agriculture progressed as much as it did during the post-Gupta period. Agricultural technology was exceedingly advanced throughout the mediaeval period. The Chola dynasty's agrarian culture hides the fact that the communal holding of land was eventually partitioned into individual plots, each with its own irrigation infrastructure. The British rule in India can be divided into two periods: the East India Company's rule, which lasted from 1757 to 1858, and the British Government's rule, which lasted from 1858 to 1947. Another significant development in Indian agriculture occurred between 1850 and 1947, when it became commercialized. As a result, the current generation should be aware of the use of our historical and traditional agricultural systems. This will allow us to construct future study, and it is also time to develop.*

**KEYWORDS:** Yava – Sanskrit Word, Barely, Atharvaveda – Sanskrit from Atharvanas, Veda – Knowledge, Krishi – Parashara – Ancient Indian Agriculture Method, Annapala – Head Food Grains Department, Sitadhayaksha - Superintendent of Agriculture & Brihadhala - use of Fertilizer

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### 1. INTRODUCTION

Agriculture is an important part of the Indian economy and serves as its backbone. Our country's geographical location has made agricultural activities exceedingly comfortable. The physical characteristics of India, such as its climate, soil, and relief, have proven to be extremely beneficial to the growth of a wide range of crops. Agriculture is the primary source of income for the Indians.

The current situation of Indian agriculture has seen only minor modifications, and it is difficult to imagine what our agriculture was like before independence. There was minimal advancement in farm technology in our country over 190 years, from the Battle of Plassey in 1757 to our country's independence in 1947.

Since 9000 BC, India has had a complex agricultural system. Wheat, barley, and jujube had been domesticated in the Indian subcontinent by 9000 BC, and processes for agriculture's established mode of production had been invented. During the Neolithic period, new agricultural practices such as threshing, row cropping, cotton spinning, and grain storage in granaries were developed. They also passed down their agricultural practices to the

next generation.

Our history is noisier than that of any previous culture. As Indian citizens, we should be proud of our great agricultural past. Agriculture in India is not a new phenomenon; it dates back to the Neolithic period (7500-4000 B.C.). It transformed early man's lifestyle from nomadic hunter of wild berries and roots to land cultivator. Agriculture is based on the teachings and knowledge of great saints.

## **2. THE METHODS AGRICULTURE SYSTEMS IN INDUS VALLEY CIVILIZATION**

The plough was one of the pre-Harappan culture's technological breakthroughs, and it was employed by the Indus Valley civilization. The farmers of the Indus Valley grew peas, sesame, and dates. Rice was also cultivated in the Indus Valley Civilization. The Indus valley economy was based on mixed farming. Irrigation had been perfected in the Indus Valley Civilization by 4500BC<sup>2</sup>.

## **3. AGRICULTURE DURING ANCIENT PERIOD**

Agricultural techniques in the Vedic period began around 1500 BC and ended around 500 BC, roughly coinciding with the end of the Chalcolithic period and the beginning of the Iron Age in India. The major m sites stretch from northwestern India to the Ganges' whole alluvial plain. Pastoralism and agriculture were the mainstays of the Vedic Aryans' subsistence. According to Max Muller, the term Aria, derived from the root ar, to sir, i.e., stirring dirt with a stick or plough, indicates that Aryans were cultivators prior to the Indo-Iranian and Indo-Aryan<sup>3</sup> cultures.

### **ATHARVAVEDA**

Manuring yava (barley) seeds with clarified butter and honey as a pre-sowing preparation of seeds was adopted in the late Vedic period. The Atharvaveda contains the mantras that are used in this practice.

Weeds, in addition to the pests identified in the Atharvaveda, were introduced during the late Vedic period. Charms and spells, along with some stuff that appears to have pesticide effects, were used as preventatives and preventive precautions. Rainwater for irrigation is given significant importance in the Atharvaveda. The importance of utilising river–water by diverting its route in a canal grew. Green–manuring in soil fertility has been practised since the Atharvavedic period and is still practised now.

The Mahabharata briefly referenced the river Sarasvati's several names as it flowed in various directions. Seven Sarasvatis are mentioned, representing the river's seven branches. In the Rigveda and Mahabharata, Saraswati's final union with the sea is mentioned. The plow's design is described in detail in Krishi – Parashara (c.400 BC), with Sanskrit names for the various sections. Over the years, this basic design has seldom changed. Land was measured with a bamboo stick of a particular size<sup>4</sup>.

## **4. IMPORTANCE OF AGRICULTURE IN VEDIC PERIOD**

Planting a wide range of cereals, vegetables, and fruits was prevalent, and animal husbandry was a lucrative business. Farmers who lived close to nature were thought to be particularly close to God. Seeds were emphasised, and a precise cropping cycle was advised, as was the practice of creating manure from cow manure at the time for irrigation. Megasthenes, a Greek diplomat, provides an eyewitness account of Indian agriculture during the time in his book India.

As he puts it, "India contains a big number of massive mountains abounding in many types of fruit trees, as well as numerous enormous fertile plains. The majority of the land is irrigated, and as a result, the soil bears two crops per year. Millets, several types of pulses, and rice are all grown in India, in addition to cereals. Because there are two monsoons each year, the residents gather in two harvests each year<sup>5</sup>."

In Tamil Nadu, many old people remember their parent's custom of waiting at the door every time before a real and leaving the food to someone who is hungry and fasting and fasting on days when no one comes. In ancient India, the virtue of food sharing was so highly cherished. It is hard to imagine that people would have suffered from hunger. According to historical sources from Chengalpattu, everyone received a thousand kilos of food a year.

High yields in Ancient Indian Land Historical records from the tenth century to the nineteenth century show that agricultural lands were donated from many parts of India.

Most of the commentators and reports on ancient India agree that Indian Agricultural lands were the best in the world in terms of productivity.

Irrigation systems of our Indian agriculture as well Irrigation system is of the utmost value in agriculture and must economical and attentive. Every inch of water is used for growing crops.<sup>6</sup>

## **5. AGRICULTURE IN MAURYAN PERIOD**

The agriculture of the Mauryan period was bountiful and was too strong. The head of the agriculture officers was called "Annapala and Rajjukas". The importance of the economy under the Mauryas was agriculture and was the main source of revenue<sup>7</sup>.

The Arthashastra states that the role of citizens in the major focus is the agricultural sector. During this period the provision of a special officer was titled "Sitadhyaksh" or superintendent of agriculture. Kautilya believed that a king must also learn about agriculture. The Arthashastra has a lot of valuable information about the Management of agriculture.<sup>8</sup>

## **6. THE FLOURISHING AGRICULTURE IN THE POST-GUPTA PERIOD**

In Indian history, no other period of agriculture has made so much progress as was evident in the post-Gupta period. There were so many factors responsible for the agriculture advancement. In first reason to land grants became very common during the post Gupta period. The way of land grants for the growth of agriculture. Second, with the decline of the urban centers the artisans attached to various industries lost their jobs and were forced to migrate to the village. These artisans were experts to make the tools and implements. So it was led to supply to persons new and more effective types of equipment. Thirdly, the irrigation system during this period was a deep well, Araghah, etc. Another important work was the use of big plough "Brihadhala" and the use of the fertilizer also was responsible for the increase the crop production. Finally, the Quality of seeds became very common. So above which mentions the ways for progress in agriculture during Gupta Period<sup>9</sup>.

## **7. IMPORTANCE OF SOUTH INDIAN AGRICULTURE**

South India's agricultural location was also promising. Rice, sugarcane, millets, black pepper, various cereals, coconuts, beans, cotton, tamarind and sandalwood, jackfruit, coconut, palm, areca, and plantain trees were just a few of the crops grown in the south. For long-term agriculture, systematic ploughing, manuring, weeding, irrigation, and crop protection

were used.

South India's agrarian culture indicated that communal landholdings gradually gave way to individual plots, each with its own irrigation system, during the Chola era. The Cholas had experts in charge of water disposal, including the usage of tank-and-channel networks to deliver water to drier areas. Individual agricultural habits may have changed, resulting in fewer dry cultivated areas<sup>10</sup>.

## **8. DEVELOPMENT OF AGRICULTURE DURING THE MEDIEVAL PERIOD**

The expansion of cultivation and the organisation of land relations through land grants characterize the early mediaeval period in Indian history. During the Middle Ages, technology was at its pinnacle. Agriculture was invented and improved in medieval India. Medieval India had a large area of land cultivated, by presents residing in this geographical area. The Tughlug rulers tried to improve agriculture production-wise by introducing irrigation facilities. The Mughal rulers also tried to develop agricultural productivity.

The Mughal Empire's most significant crops were stable crops and cash crops. Three main stable crops existed during the Mughal Empire. Rice, wheat, and millet were the crops in question. Each crop was grown in a particular region or zone. In the meantime, cash crops provided the empire with items to sell to foreigners in order to obtain silver from both the west and other countries. Agriculture had the basic aspects under the Mughal Empire: peasants, infrastructure, tax collection, land ownership, and agricultural difficulties. The 'Sakia,' or Persian wheel, was used to transport water from a river to a high region for agriculture. Mughal farmers used specialised agricultural technologies. The 'Sakia' was propelled by either cow or ox. The Mughal Empire had a convoluted system of land ownership. The land was under the jurisdiction of peasants<sup>11</sup>.

## **9. LAND SYSTEM DURING THE BRITISH PERIOD**

The East India Company's control, which lasted from 1757 to 1858, and the British Government's rule, which lasted from 1858 to 1947, are the two periods of British rule in India. The installation of British control was a long and slow process that lasted over a century. The British conquest, which began with the Battle of Plassey in 1757 and ended in 1858, took a long time to complete. England was going through a period of revolutionised manufacturing due to improvements in production procedures at the time. As a result of the British conquest, the village community gained in strength, partly due to the establishment of a new land revenue system and partly due to the commercialization of agriculture. The Indian peasantry was widely exploited as a result of the new land system and commercial agriculture, resulting in frequent famines. The British had no desire to see India prosper as a nation.

In India, the British administration led to the establishment of a new land system. Throughout the early years of its control, the East India Company's directive was to generate as much revenue as possible. This method resulted in exorbitant demands from peasants, who were unaware that the British were also murdering the goose that lay the golden egg. Land revenue, on the other hand, was a major source of funds for the Company's administration in India, as well as a greater annual return from their conquest of India for the Company's directors in England. In 1793, the British adopted land settlement to maintain agricultural stability. The concept of "permanent settlement" was widely accepted in Bengal and the neighbouring areas. Revenue collectors were raised to the position of private landlords as a result of the settlement. It ensured that land revenue would remain stable indefinitely. The zamindar was intended to deposit and raise land revenue for the state under the Zamindari system. Later, the British expanded the settlement to other states and appointed zamindars

there as well, but they did so under a system called as 'temporary settlement,' in which land revenue in other states may be considered after 25-40 years.

Each peasant who possessed a parcel of land was designated as the landlord under this arrangement, known as the ryotwari settlement, and was solely responsible for the payment of land tax to the government. The British land system, introduced by Lord Cornwallis, contributed to the concentration of economic power in the hands of absentee landowners and money lenders in rural India. Agriculture and the peasantry suffered as a result<sup>12</sup>.

## **10. BEGINNING OF COMMERCIALIZATION IN INDIA**

Between 1850 and 1947, another big breakthrough in Indian agriculture happened when it became commercialized. Agriculture's commercialization entails the production of crops for sale rather than personal use. A portion of agricultural output is generated for the market at every stage of the country's economic history. England had accomplished the Industrial Revolution. Cotton, jute, and sugarcane were in high demand by British firms in particular. Peasants were lured to switch from commercial to food crops by offering a higher market price as bait, as the latter was more profitable. As a result, peasants began to transition to industrial crops, and the commercial agricultural movement grew so strong in some places that peasants began to buy commodities from the mandis for their own consumption.

Around 1850, an extensive railway network was established in India, hastening the process of commercial agriculture necessitated by the Industrial Revolution. Indian agriculture began to produce for foreign markets once railways connected the country's interior to ports and harbours, as well as urban marketing hubs.

Between 1850 and 1947, when the Britishers were India's principal "ruling power," agriculture became increasingly commercialised. However, this aided the farmers in certain ways. Drought famines became more common, as well as more severe, in the second half of the nineteenth century. The government's canal-building efforts in the first half of the twentieth century were insufficient to overcome the agricultural drought.

Land tenure systems like as the zamindari, Mahalwari, and Ryotwari all existed in our country at one time. Land tax was collected from farmers by zamindars in the first system, by the village headman with the assistance of the entire village in the second system, and by the farmers directly to the state in the third system. The tenants were expected to cultivate the property in all three systems.

The zamindars drank the blood of the poor in the countryside. This parasitic class took a large portion of the harvest, leaving the true cultivators with hardly enough money to get by<sup>13</sup>.

## **11. AGRICULTURE SYSTEM IN MODERN INDIA AND GREEN REVOLUTION**

In comparison to other developing countries, India's agricultural development was slow in the twentieth century. However, there has been significant progress in the agriculture sector throughout this time. India had to deal with a significant food scarcity on the eve of independence. Foodgrain output has been severely harmed as a result of the division. Because agricultural production did not meet the population's fundamental demands, food grains had to be imported from outside. As a result, agricultural development was prioritised in order to achieve food grain self-sufficiency and feed the burgeoning population. After Independence, Pandit Jawahar Lal Nehru remarked, "Everything else can wait except agriculture," and this approach was reflected in a variety of public policies and investment decisions, particularly in the areas of irrigation, fertilisers, production, land reforms, and community development.

The Green Revolution in India was brought about by the systematic deployment of new agricultural methods for crop production. In agriculture, the introduction of hybrid and high-yielding seed varieties was a major technological achievement. This switch occurred at a key time in India's history, when the country was unprepared for the severe droughts of 1965-1966 and 1966-67.

## 12. ROLE OF AGRICULTURE IN THE INDIAN ECONOMY

India has long been and continues to be a country dependent on agriculture, which plays a critical part in our country's overall success. Despite the fact that our agriculture has been prospering, its contribution to GDP has been steadily shrinking. Agriculture provided two-thirds of our national income during the First World War.

In 1960-61, 548 people worked in agriculture and related occupations, compared to 48 percent in 1970-71 and 37 percent in 1985-86. However, no other sector, when considered separately, comes close to matching it. Agriculture is the most important source of income for the people in our economy, which is dominated by agriculture.

Agriculture is the most important source of employment in India. Agriculture employed 69.5 percent of the working population in 1951. 66.7 percent of these persons were still employed in 1981. However, due to the rapid growth of the population, the overall number of persons working in agriculture has increased dramatically<sup>14</sup>.

## CONCLUSIONS

The agricultural sector is critical to the region's economy. It, like the rest of the economy, is moving to a market economy, with significant changes in social, legal, structural, production, and supply structures. Agriculture is the backbone of the Indian economy, and it remains a source of pride despite decades of intensive modernization. Because it is the country's largest industry, it employs roughly 65 percent of the country's total workforce. However, its share of GDP has decreased in recent years, falling to 18% in 2008-09. This area has a lot of room for improvement.

India's agriculture must transition from a traditional to a scientific method. It should concentrate on market-oriented products rather than food grain self-sufficiency. Instead of struggling in a traditional and superstitious setting, Indian agriculture must adapt to a technical and research-oriented environment. The Indian government should empower rural farmers with contemporary technologies as well as market knowledge and export possibilities. It should strive to break free from the hegemony of trades and middlemen in the market and provide direct market access to farmers. Agriculture in India has a lot of promise because it has the most variety in terms of physiography and climate, as well as the most resources, such as manpower. Agriculture in India should make use of these resources and grow into one of the fastest-growing and most important sectors of the economy.

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